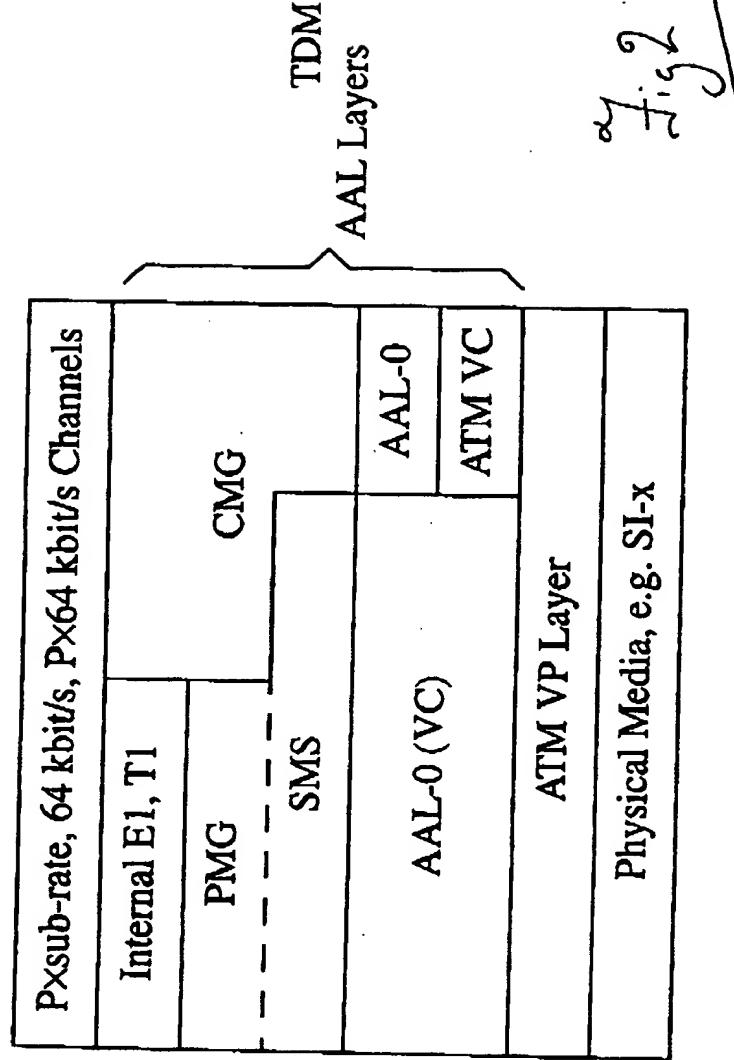
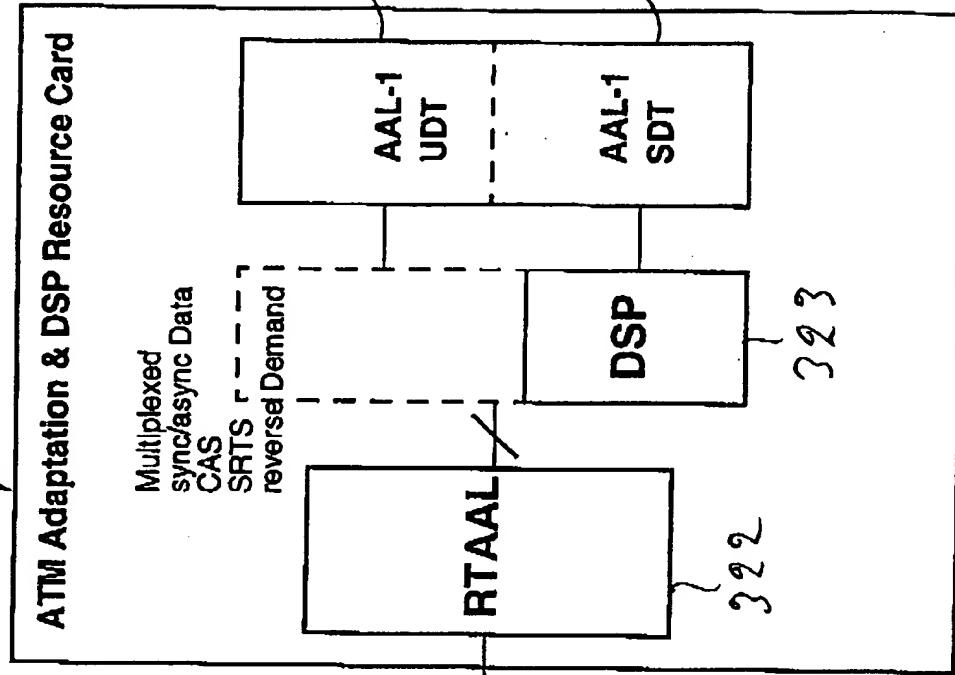
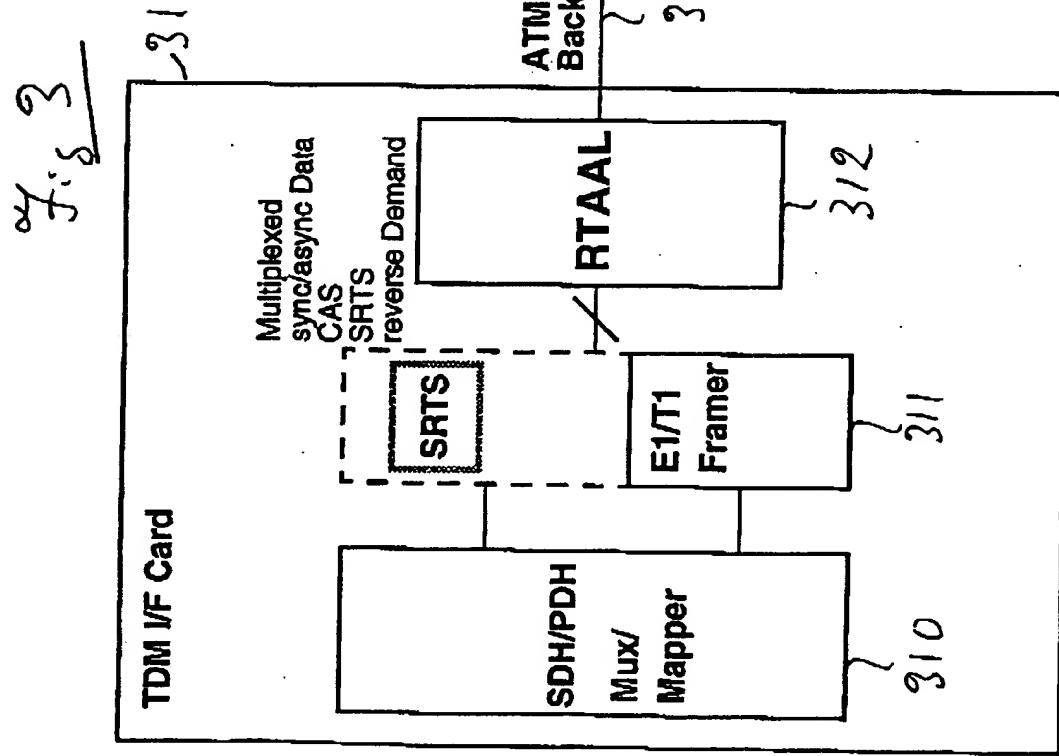


Figure 1





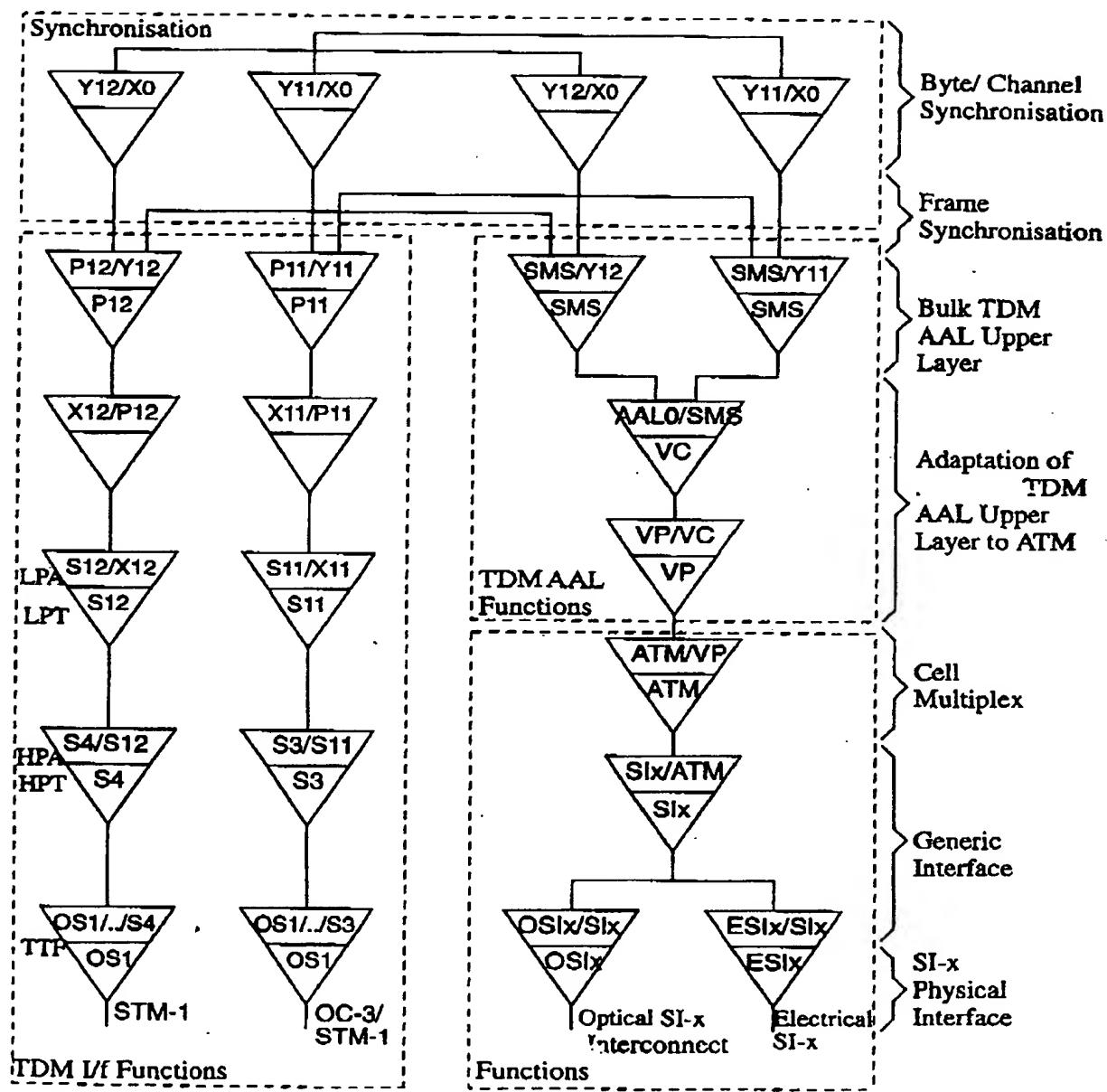


Fig. 4

a) Asynchronous Input Primary Multiplex Signals (E1s)

#A	(n-1) 31 0	(frame n) 31 0	(frame n+1) 31 0	(frame n+2) 31 0
#B	(frame n-1) 31 0	(frame n) 31 0	(frame n+1) 31 0	(frame n+2) 31 0
#C	0 (frame n-1) 31 0	(frame n) 31 0	(frame n+1) 31 0	(frame n+2) 31 0

b) Frame Synchronized Primary Multiplex Signals (E1s)

#A	31 0	(frame n) 31 0	(frame n+1) 31 0	31 0
#B	31 0	(frame n) 31 0	(frame n+1) 31 0	31 0
#C	31 0	(frame n-1) 31 0	(frame n) 31 0	31 0

equipment frame synchronization reference

c) Byte Synchronized Primary Multiplex Signals (E1s)

#A	(n) 15 16	(n) 31 0	(n+1) 15 16	(n+1) 31 0	(n+2) 15 16	(n+2)
#B	(n) 7 8	(n) 31 0	7 8	(n+1) 31 0	7 8	(n+2)
#C	(n-1) 23 24	:0	(n) 23 24	:0	(n+1) 23 24	(n+1)

Pointer Value

d) Byte Synchronized E1s after Switching: null switch

#A	(n-2) 31 0	(n) 15 16	(n-1) 31 0	(n+1) 15 16	(n) 31 0	(n+2)
----	------------	-----------	------------	-------------	----------	-------

timeslot integrity for P×64 kbit/s lost at sync boundary

e) Frame Slipping

for fast i/p, buffer store full

31 0	(frame n) 31 0	(frame n+2) 31 0	(frame n+3) 31 0
------	----------------	------------------	------------------

frame n+1 removed

for slow i/p, buffer store empty

31 0	(frame n) 31 0	(frame n) 31 0	(frame n+1) 31 0	(frame n+1) 31 0
------	----------------	----------------	------------------	------------------

frame n repeated

f) Byte Slipping

for fast i/p, buffer store full

(n) 15 16	(n) 31 0	(n+1) 15 17	(n+1) 31 0	(n+2) 16 17
-----------	----------	-------------	------------	-------------

byte 16 of frame n+1 removed

Original Pointer Value

New Pointer Value

for slow i/p, buffer store empty

(n) 15 16	(n) 31 0	(n+1) 15 15	(n+1) 31 0	(n+2) 14 15
-----------	----------	-------------	------------	-------------

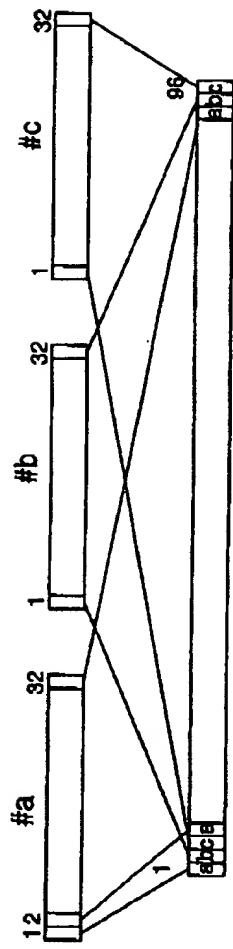
byte 15 of frame n+1 repeated

Original Pointer Value

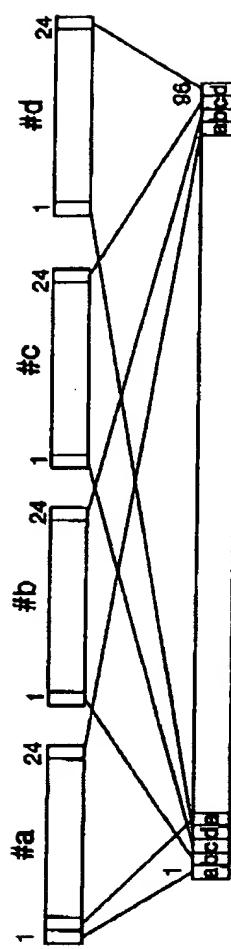
New Pointer Value

4: S 5

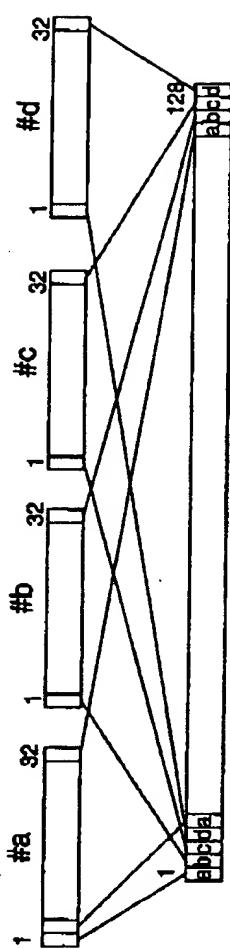
3x E1s
of 32 bytes / 125μs frame



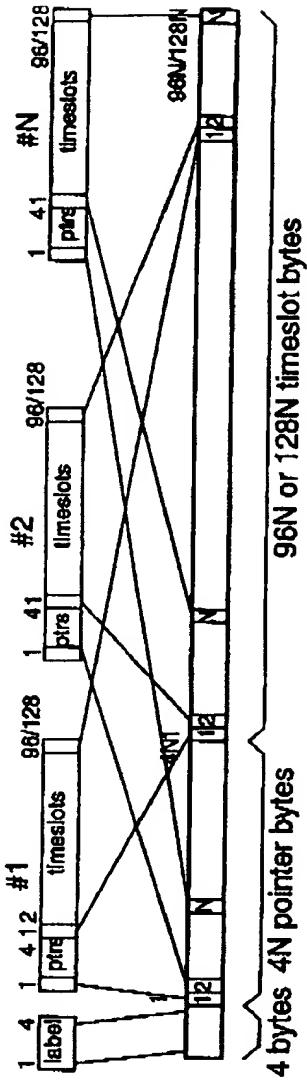
4x T1s
of 24 bytes / 125μs frame



Primary Multiplex Group-21
of 96 bytes / 125μs frame

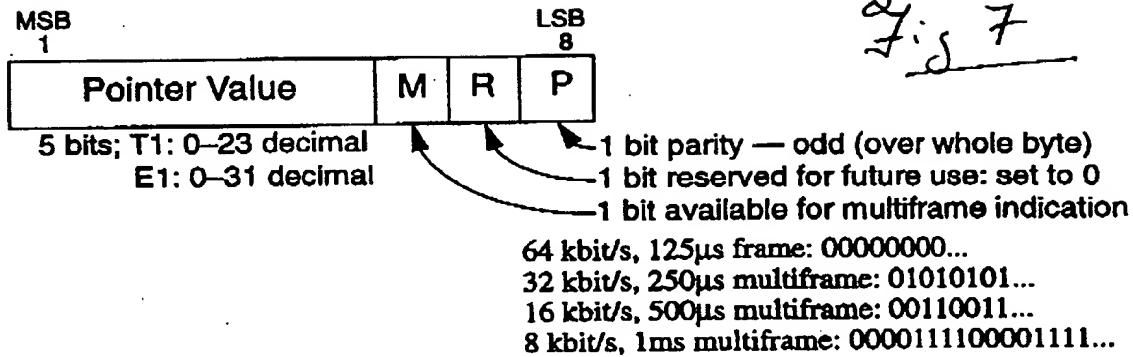


Nx Primary Multiplex Groups
of 96/128 timeslots +4 pointer bytes
+ label field / 125μs frame



4 : 6

Pointer Byte Format



Pointer Bytes for Primary Multiplex Group-21

Pointers for 4x T1s

1st byte	2nd byte	3rd byte	4th byte
#a: 0-23	#b: 0-23	#c: 0-23	#d: 0-23

Pointers for 3x E1s

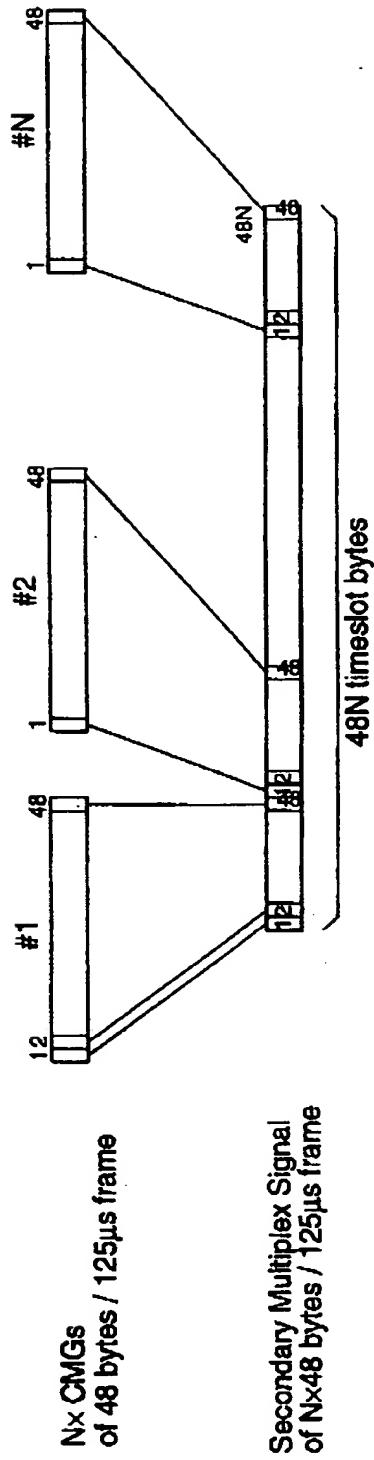
1st byte	fixed =24	#a: 0-31	#b: 0-31	#c: 0-31	4th byte

E1 group indication

Pointer Bytes for Primary Multiplex Group-22

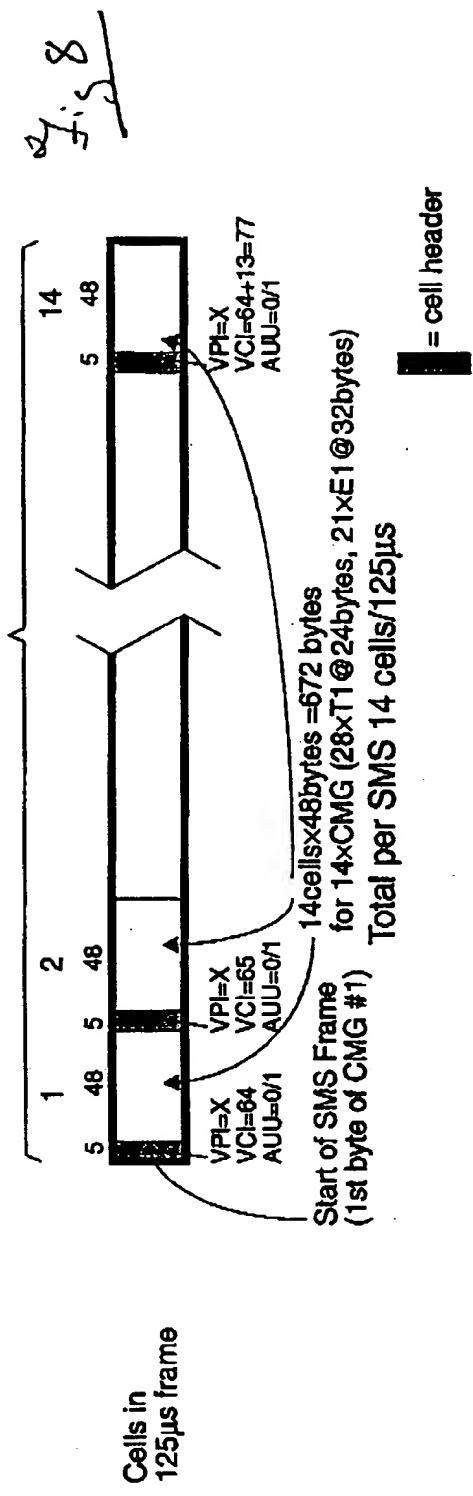
Pointers for 4x E1s

1st byte	2nd byte	3rd byte	4th byte
#a: 0-31	#b: 0-31	#c: 0-31	#d: 0-31



SMS in AAL-0 for T3's Capacity of timeslots using 14xCMG

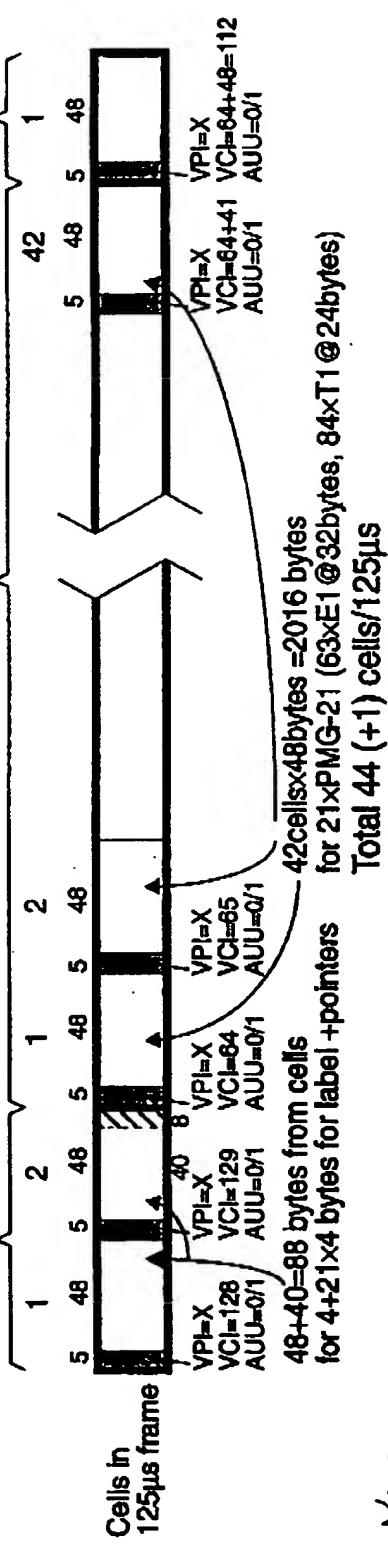
Pointer Cell



SMS in AAL-0 for STM-1's Capacity of timeslots using 21xPMG-21

```

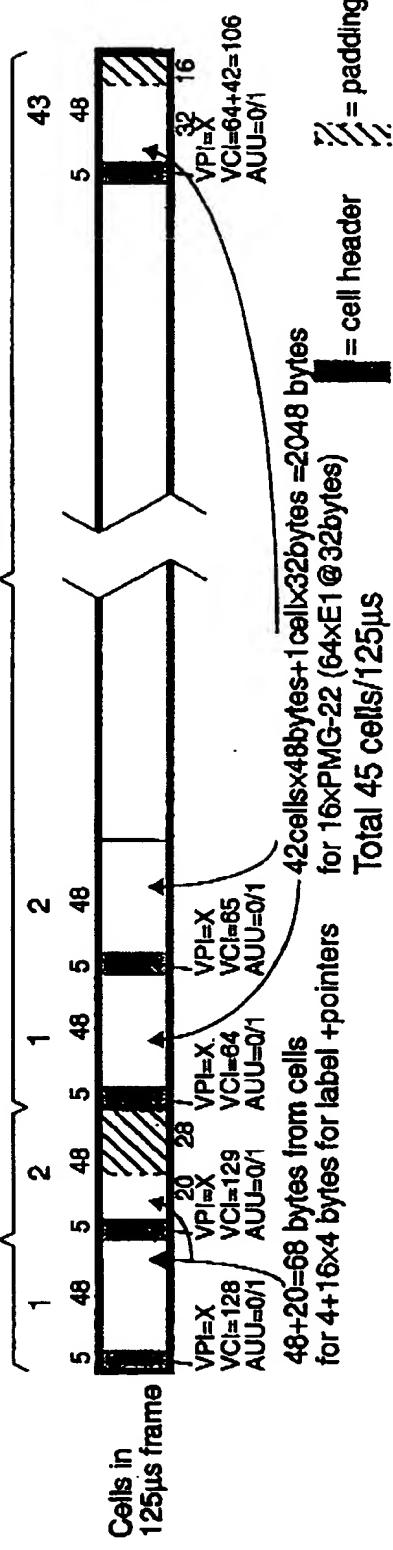
graph TD
    PC[Pointer Cells] --> TTC[Traffic Timeslot Cells]
    TTC --> GCell[Group Cell]
  
```



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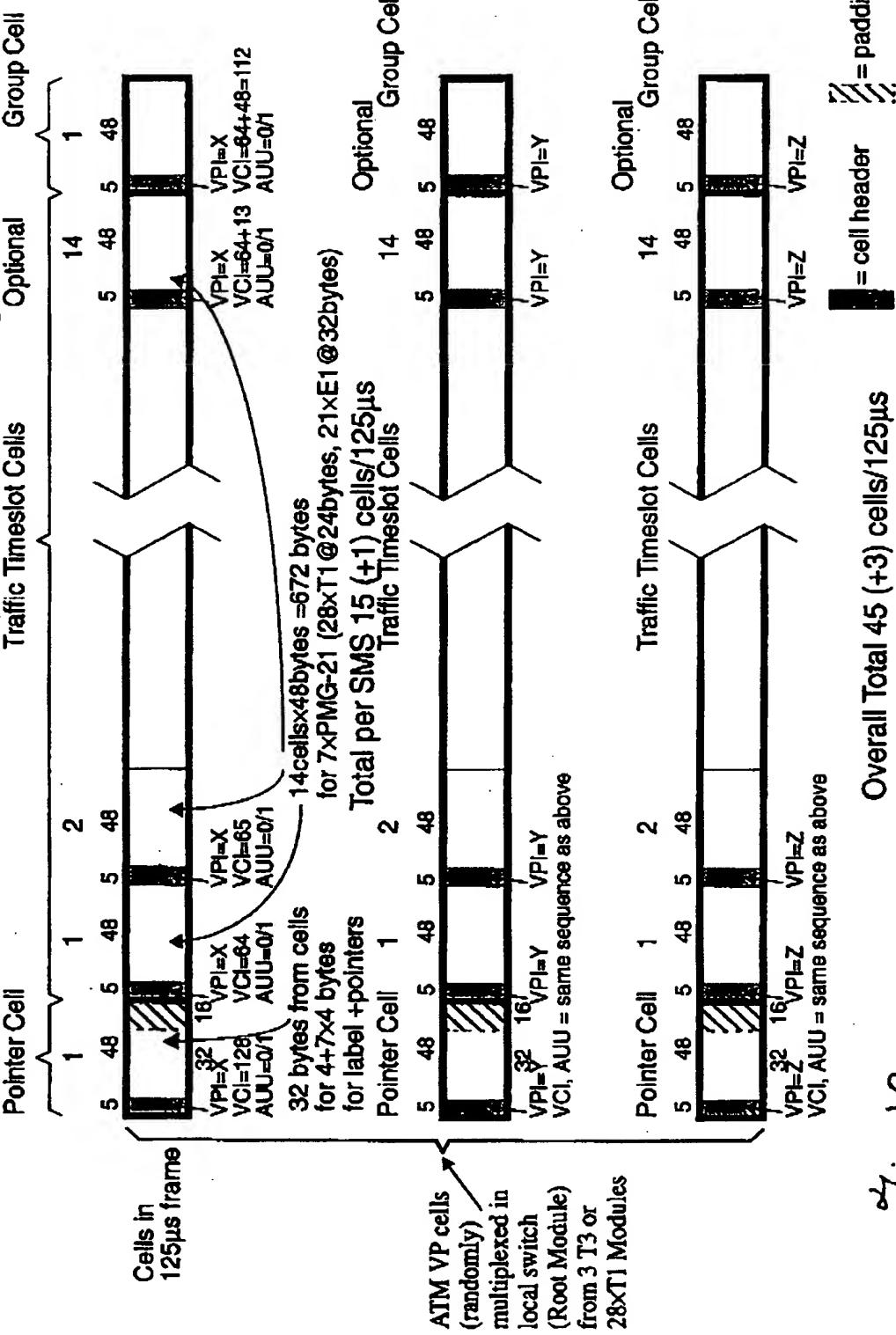
SMS in AAL-0 for E4's Capacity of timeslots using 16xPMG-22

Traffic Timeslot Cells



Total 45 cells/125μs
= cell header
|| = padding

SMS in AAL-0 for T3's Capacity of timeslots using 7xPMG-21



SMS in AAL-0 for E3's Capacity of timeslots using 4xPMG-22
Pointer Cell Traffic Timeslot Cells
Optional G

